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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/023,236      | 12/17/2001  | Kenji Shimano        | 81087-276978        | 3754             |

7590 05/25/2004  
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| EXAMINER |
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LEA EDMONDS, LISA S

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2835

DATE MAILED: 05/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/023,236             | SHIMANO ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Lisa Lea-Edmonds       | 2835                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 December 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-13, 17, 19 and 22-26 is/are rejected.
- 7) ☒ Claim(s) 14, 15, 18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/17/01</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: first, second, and third friction forces and separation force as claimed in claims 5-8 and 23-26 respectfully.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-8 and 23-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear to the examiner what applicant regards as the first, second, and third friction forces and separation force as claimed.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-12, 16-19, and 22-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyagawa et al. (5268817). With respect to claims 1-12, 16-19, and 22-26, as best understood, Miyagawa et al. teaches a portable computer configurable in a

tablet configuration, a laptop configuration, and a closed configuration, said portable computer comprising: a display unit having a display device and a back surface; a base unit having a primary input device and a bottom surface; and a hinging assembly coupling said display unit to said base unit, said hinging assembly having a first hinge with a first axis of rotation and a second hinge with a second axis of rotation, wherein said back surface of said display unit is in contact with said bottom surface of said base unit when said portable computer is in said tablet mode, said primary input device and said display device are between said back surface of said display unit and said bottom surface of said base unit when said portable computer is in said closed configuration, one of said first hinge and said second hinge is rotated to reconfigure said portable computer between said closed configuration and said laptop configuration, and said first hinge and said second hinge are rotated to reconfigure said portable computer between said closed configuration and said tablet configuration, wherein said first axis of rotation and said second axis of rotation are parallel, wherein said first axis of rotation is laterally offset from said second axis of rotation, wherein the rotation of said first hinge and said second hinge permits said display unit to rotate approximately 360 degrees relative to said base unit, wherein a first friction force resists rotation of said first hinge about said first axis of rotation, and further wherein a second friction force resists rotation of said second hinge about said second axis of rotation, and further wherein said first friction force is of lesser magnitude than said second friction force, wherein a separation force applied to separate said display unit from said base unit causes said first hinge to rotate until an angle of rotation of said first hinge equals a maximum angle of rotation

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associated with said first hinge and further application of said separation force causes said second hinge to rotate, wherein said first friction force resists rotation of said first hinge in a first direction and a third friction force resists rotation of said first hinge in a second direction opposite to said first direction, said third friction force having a greater magnitude than both said first friction force and said second friction force, wherein said second hinge has a first amount of friction when rotated in a first friction and a second amount of friction when rotated in a second direction opposite to said first direction, wherein said hinging assembly further including an armature, wherein said first hinge is coupled to said armature at a first pivot point and said second hinge is coupled to said armature at a second pivot point, wherein said first hinge is coupled to said display unit so as to permit rotation of said display unit relative to said armature and said second hinge is coupled to said base unit so as to permit rotation of said base unit relative to said armature, wherein said first hinge is coupled to said base unit so as to permit rotation of said base unit relative to said armature and said second hinge is coupled to said display unit so as to permit rotation of said display unit relative to said armature, further including a latching assembly to maintain said portable computer in one of said closed configuration and said tablet configuration, wherein the angle of rotation of said display unit relative to said base unit achievable by rotating only said first hinge is at a maximum when said portable computer is in said laptop configuration, wherein one of said first hinge and said second hinge has a limited range of rotation such that an upper limit of said range of rotation is reached when said portable computer is in the laptop configuration as claimed. Miyagawa et al. also teaches a method for reconfiguring a

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portable computer among a tablet configuration, a laptop configuration, and a closed configuration, wherein said display device is contained in a display unit and said primary input device is contained in a base unit, said method comprising: when said portable computer is in said closed configuration such that said display device and said primary input device are contained between a back surface of said display unit and a bottom surface of said base unit, rotating a first hinge about a first axis of rotation to tilt said display unit relative to said base unit until said portable computer is in said laptop configuration; and when said portable computer is in said laptop configuration, rotating a second hinge about a second axis of rotation parallel to said first axis of rotation until said portable computer is in said tablet configuration, wherein said first hinge has a range of rotation having an upper limit, and further wherein rotating said first hinge to said upper limit places said portable computer in said laptop configuration, wherein rotating said first hinge includes applying a separating force to said display unit and said base unit, wherein a first friction force resists rotation of said first hinge and a second friction force resists rotation of said second hinge, wherein said first friction force is smaller than said second friction force when said portable computer is being changed from said closed configuration to said laptop configuration, wherein said first friction force is greater than said second friction force when said portable computer is being changed from said tablet configuration to said laptop configuration as claimed (see for example figures 5-7D and column 5 line 16 through column 6 line 65).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa et al. (5268817) as applied to the claims above, and further in view of Hawkins et al. (6366935). With respect to claim 13, Miyagawa et al. teaches the invention as set forth by claims 12 and 1 (see above). However, Miyagawa et al. is silent on the type of latching assembly used. Hawkins et al. is relied upon for its teaching of a latching assembly including a latching arm (51) having a first projection (53) and a latching body (55) having a first cavity adapted to receive said first projection to maintain said portable computer in one of said closed configuration and said tablet configuration as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the latching assembly of Hawkins et al. into the computer of Miyagawa et al. to facilitate storage, transport and use of the computer.

***Allowable Subject Matter***

8. Claims 14, 15, 18, 20, and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: as to claims 14 and 15, patentability resides, as least in part, in the latching assembly further including a latching arm having a first and second projection and a latch body having a first and second cavity as claimed, in combination with the other limitations of the claims; as to claim 18, patentability resides, as least in part, in the base unit partially rests on one of said first hinge and said second hinge when said portable computer is in said laptop configuration, in combination with the other limitations of the claims; as to claims 20 and 21, patentability resides, as least in part, in closing a latching assembly when said portable computer is in said tablet configuration to couple said base unit to said display unit as claimed, in combination with the other limitations of the claims.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please note the portable computers of Emma et al. (6262885), Shimano (20030112588) and Shimano et al. (20030112589).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 571-272-2043. The examiner can normally be reached on Monday - Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2800, ext 35. The fax phone



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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Lisa Lea-Edmonds  
Primary Examiner  
Art Unit 2835